Application No. 09/588,407
GAU 1733
Filed June 6, 2000

In further response to the Examiner's comment, the abstract is shortened and amended to read as follows:

ABSTRACT OF THE DISCLOSURE

The apparatus of the present invention is generally characterized by a heating/inflation module having pressurizable interior and an attached heat curable pre-preg. In particular, an elastomeric, seamless composite is provided that includes a heating element disposed within a thermoset resin matrix. The composite adapted to maintain a consistent temperature profile and an internal air pressure. A first end piece is attached to a first end of the composite and has an air port for communication with a compressed air source, a vacuum port for communication with a vacuum supply source and at least one electrical cable port for communication with a power supply source. A second end piece attached to a second end of the composite. The apparatus further includes a pre-preg removably attached to an outer surface of the composite. The pre-preg includes a structural fiber matrix supporting a heat curable resin. The composite is constructed by applying a liquid silicone matrix to at least one layer of braided or wound and/or tape fibers, wherein a portion of the fibers are electrically conductive. The layer of braided fibers is introduced into a mold, and a removable, expandable inner bladder is then loaded into the mold. The inner bladder is inflated to conform the layer of braided fibers to an interior surface of the mold. An electric current is caused to flow to the conductive fibers to cure the silicone matrix into a stable, elastomeric state. The composite is removed from the mold. A method for repairing a damaged section of a conduit is also disclosed.

~~Additionally, in another embodiment of the invention an inflatable heater is disclosed which includes a non-metallic heating stratum or element inextricably located within a fluorosilicone, silicone and~~

~~fluorocarbon matrix. The inflatable heater is made by wrapping uncured sheets of material about a mandrel and including a non-metallic heating stratum, such as carbon fibers. The described matrix utilizes resistive heat from the heating stratum to cure into a final resilient form. The carbon fibers are arranged in a fashion to allow flexibility and durability in the final form.~~